



GREAT WESTERN CHEMICAL Co.

TECHNICAL CENTER

5700 NORTHWEST FRONT AVENUE PORTLAND, OREGON 97210 (503) 227-1616 FAX: (503) 227-7377

December 16, 1997

Dockets Management Branch (HFA-305)
Food and Drug Administration
12420 Parklawn Dr., rm. 1-23
Rockville, MD 20857

7 8 3 5 '97 DEC 22 P2 :25

Dear Sir or Madam:

Regarding the proposed *Guide To Minimize Microbial Food Safety Hazards For Fresh Fruits And Vegetables*, I would like to offer the following comments. Most of the comments revolve around the issues of cleaning and sanitizing:

1. Cleaning is the removal of soil from a surface by mechanical and/or chemical means. This needs to be added to the definitions.
2. The definition of sanitizing needs to have the word clean inserted into the first sentence. It should read "Sanitize means to adequately treat a clean produce—".
3. The draft confuses and interchanges two separate operations. One, the treatment of water with low levels of various biocides. This is to lower cross contamination and reduce biofilms in water flume systems. The other is a sanitizing of a hard surface or surface of a fruit or vegetable. Sanitizing uses biocides at a strength of 10 – 1000x stronger than treating water. They are two separate processes, and should not be confused together.
4. Another rule overlooked is that you cannot sanitize a dirty surface. There are no recognized one step clean and sanitize processes. You always clean a surface, then sanitize it.
5. Adding a biocide, like chlorine, to the wash solution is ineffective to sanitize, and can be very dangerous. Most alkaline wash solutions have a pH greater than 10.5. At that pH, chlorine may improve the cleaning but will not kill bacteria. Other fruit and vegetable washes are based on phosphoric acid. Their pH during use is under 3. At that pH, any added chlorine will produce a chlorine gas, an obvious severe hazard. Paragraph after paragraph in section 2.1 Wash Water refers to adding various biocides to the wash water. This is an obvious and severe error.
6. The best method for helping to control microbial populations on the surface of a fruit or vegetable is to follow the following steps:
 - a. Rinse off the gross soil with water.
 - b. Wash the product with a proper fruit and vegetable wash, following manufactures directions.
 - c. Thoroughly rinse off the wash solution with water.
 - d. Sanitize the product with biocide such as chlorine, following manufactures directions.
 - e. Final rinse the product with potable water.
7. All water used to process the products should be treated with low levels of chlorine, chlorine dioxide, or PAA. This will control cross contamination.

97N-0451

C26

California: Arleta, Bakersfield, Fresno, Milpitas, Richmond, San Diego, Santa Fe Springs, Santa Rosa, Stockton **Utah:** Salt Lake City **Oregon:** Eugene, Portland
Washington: Pasco, Seattle, Spokane **Montana:** Helena **Alaska:** Anchorage, Fairbanks, Kenai **Colorado:** Golden **Arizona:** Phoenix, Tucson **Idaho:** Idaho Falls, Nampa
Nevada: Sparks, Winnemucca **Minnesota:** Minneapolis **Texas:** Carrollton **Mexico:** Guadalajara-Jalisco **Canada:** Vancouver-British Columbia, Calgary-Alberta

December 16, 1997

8. Section C.2.4, Equipment maintenance, refers to "keeping the equipment as clean as practicable". Not only must this equipment be clean, but also sanitized. This is a severe omission. This error is repeated throughout the entire section.

I would like to compliment the Agency for producing a very good working draft of this guideline. The area of protecting the public health is one that we all must support. If there is anything that I may do to be of assistance to you, please do not hesitate to ask.

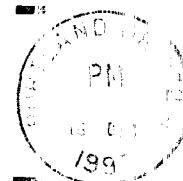
Sincerely,

A handwritten signature in black ink, appearing to read "Dennis Bogart", with a long horizontal flourish extending to the right.

Dennis Bogart
Director of Technical Service

GREAT WESTERN CHEMICAL Co.®

TECHNICAL CENTER
5700 N.W. FRONT AVENUE
PORTLAND, OREGON 97210



Dockets Management Branch (HFA-305)
Food and Drug Administration
12420 Parklawn Dr., rm. 1-23
Rockville, MD 20857

